Rec'd 11/1/22

# **2021 CERTIFICATION**

Consumer Confidence Report (CCR)

From Latanua

City of Jackson

PRINT Public Water System Name MS0250008 and MS0250012

List PWS ID #s for all Community Water Systems included in this CCR

CCR DISTRIBUTION (Check all boxes that apply)	
INDIRECT DELIVERY METHODS (Attach copy of publication, water bill or other)	DATE ISSUED
□ Advertisement in local paper (Attach copy of advertisement)	
Ճ On water bill (Attach copy of bill)	7/6/2022
□ Email message (Email the message to the address below)	
Other (Describe:)	
DIRECT DELIVERY METHOD (Attach copy of publication, water bill or other)	DATE ISSUED
☐ Distributed via U.S. Postal Service	
Distributed via E-mail as a URL (Provide direct URL):	
□ Distributed via Email as an attachment	
□ Distributed via Email as text within the body of email message	
□ Published in local newspaper (attach copy of published CCR or proof of publication)	
□ Posted in public places (attach list of locations or list here)	
CXPosted online at the following address (Provide direct URL): https://www.jacksonms.gov/documents/2021-annual-drinking-water-quality-report/	6/29/2022
CERTIFICATION  I hereby certify that the Consumer Confidence Report (CCR) has been prepared and distributed to its custor the appropriate distribution method(s) based on population served. Furthermore, I certify that the information is correct and consistent with the water quality monitoring data for sampling performed and fulfills all CCR report of Federal Regulations (CFR) Title 40, Part 141.151 – 155.	n contained in the report equirements of the Code
Name Title	Date
SUBMISSION OPTIONS (Select one method ONLY)	

You must email or mail a copy of the CCR, Certification, and associated proof of delivery method(s) to the MSDH, Bureau of Public Water Supply.

Mail: (U.S. Postal Service)
MSDH, Bureau of Public Water Supply
P.O. Box 1700
Jackson, MS 39215

Email: water.reports@msdh.ms.gov

## 2021 Annual Drinking Water Quality Report City of Jackson PWS ID#: 0250008 & 0250012 June 2022

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

If you have any questions about this report or concerning your water utility, please contact Mary D. Carter at 601.960.2090. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on every other Tuesday of the month at 10:00 AM or 6:00 PM within the City Hall.

Our water source is from wells drawing from the Sparta System, J. H. Fewell WTP is surface water intake for Pearl River, O.B. Curtis WTP is surface water intake from the Ross Barnett Reservoir. The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identified potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the City have received lower to moderate susceptibility rankings to contamination.

We routinely monitor for contaminants in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that we detected during the period of January 1 to December 31, 2021. In cases where monitoring wasn't required in 2021, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm-water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations and septic systems; radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily indicate that the water poses a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water. A treatment technique violation occurs when a water system fails to treat its water in the way prescribed by MSDH and the EPA.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system.

Contaminant	Violation Y/N	Date Collected	Level Detecte	Range of Detects d # of Samples Exceeding MCL/ACL	or Unit Measur -ment	MCL e	.G	MCL	Likel	y Source of Contamination
Microbiol	ogical	Conta	minan	ts						
Total Coliform Bacteria	N N	August Septembe	Positive	1 of 120 1 of 120	NA NA		0	presence coliform bacteria ir of monthly samples	า 5%	Naturally present in the environment E Coli comes from human and animal fecal waste
Turbidity - NTU	Y	2021	1.27	0.04 - 1.3	NA	-	0		<u> </u>	Soil runoff Soil runoff
Turbidity – (Monthly %)	Y	2021	75.1 % (MIN)	75.1 – 100%	NA		NA		П	Soil runott
Radioactive	e Conta	minant	S							
Gross Alpha	N	2019*	2.4	.79 – 2.4	pCi/L	1	0	15	Eros	ion of natural deposits
Radium 228	N	2020*	1.4	No Range	pCi/L		0	5		ion of natural deposits
Inorganic (	Contam	inants		· · · · · · · · · · · · · · · · · · ·		-			-	
Arsenic	N	2021	.7	.57	ppb		n/a	10	from	ion of natural deposits; runo orchards; runoff from glass electronics production waste
Barium	N	2021	.0251	.01690251	ppm		2	2	discl	harge of drilling wastes; narge from metal refineries; ion of natural deposits
Copper	N	1-6/2021 7-12/2021	,1 ,1	0	ppm		1.3	AL=1.3	syste depo	osion of household plumbing ems; erosion of natural osits; leaching from wood ervatives
Fluoride	N	2021	.957	.193 – .957	ppm		4	4	addit teeth	ion of natural deposits; wate tive which promotes strong n; discharge from fertilizer ar ninum factories
Lead	N	1-6/2021 7-12/2021	6 11	0	ppb		0	AL=15		osion of household plumbing ems, erosion of natural osits
Nitrate (as Nitrogen)	N	2021	.245	.183245	ppm		10	10	leacl	off from fertilizer use; hing from septic tanks, age; erosion of natural ssits
Nitrite (as Nitrogen)	N	2021	.0343	No Range	ppm		1	1	leacl	off from fertilizer use; hing from septic tanks, age; erosion of natural saits
Sodium	N	2021	18.9	5.1 – 18.9	ppm		20	0	Eros	ion of natural deposit;
Disinfection	n Bv-Pr	oducts							Lead	annig
			a= 1	146 722				20	D. C	Normal and the state of the sta
HAA5	Y :	2021	65	14.6 – 73.2	pb	0		60	disin	Product of drinking water fection.
TTHM [Total trihalomethanes]	N :	2021	67	13.4 – 86.6	opb	0		80		roduct of drinking water rination.
Chlorine	N :	2021	2	.1– 3.8 r	ng/l	0		MRDL = 4	Wate	er additive used to control
Total Organic Carbon (TOC)		2021 Sampled Weekly/ Monthly	1.2 Avg	1.0 – 1.4	NA	NA		π	Natu	rally present in the ronment

\* Most recent sample. No sample required for 2021.

\*Microbiological Contaminants:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

Cartarians	Malatina	Deta	Lovel	Range of Detects or	Unit	MCLG	MCL	Likely Source of Contamination
Contaminant	Violation Y/N	Date Collected	Level Detected	# of Samples Exceeding MCL/ACL	Measure -ment	WICLG	WICL	Likely Source of Contamination
Radioactive	<b>Conta</b>	minants			-			
Radium 226 Radium 228	N	2020*	.85 1.2	.8385 1 – 1.2	pCi/L	0	5	Erosion of natural deposits
Inorganic (	Contam	inants						
Barium	N	2021	.0036	.00150036	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	2021	.6	.56	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	1-6/21	e/ <b>1</b>	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	2021	.901	.59901	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	1-6/21	3	0	ррь	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Volatile Or	ganic C	ontamin	ants					
Carbon tetrachloride	N	2021	.695	.567695	ppb	0	5	Discharge from chemical plants and other industrial activities
Disinfection	ı By-Pr	oducts						
HAA5	N	2021	74	17.6 – 74.3	ppb	0	60	By-Product of drinking water disinfection.
TTHM [Total trihalomethanes]	N	2021	77	13.1 – 82.7	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2021	1.4	.1 – 3.4	ppm	0	MRDL =	Water additive used to control microbes

<sup>\*</sup> Most recent sample, No sample required for 2021.

Monitoring and Reporting of Compliance Data Violations

In 2021, the #250008 system received violations shown in the table below.

# MS0250008 Violations for 2021

Violation	Explanation	Duration	Corrective Actions	Health Effects Language		
Surface Water Treatment Rule (SWTR)						
TT Violation for Exceedances of Single Turbidity Limits	A water sample taken 2.23.2021 showed turbidity levels greater than 1.0 NTU. This is above the standard of 0.30NTU. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.	February 23, 2021	We have taken steps to ensure the required level of treatment is maintained: The cause of the treatment lapse was identified, and repairs were made and improvements at the O. B. Curtis Water Treatment Plant to address the issue and decrease the possibility of a repeat occurrence.	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-cause organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.		
TT Violation for Exceedances of Monthly Turbidity Limits	Water samples for February 2021 showed that ×25% and March 2021 showed that 8.1% turbidity measurements were over 0.30 turbidity units per month. The standard is that no more than five percent (5%) of samples may exceed 0.30 turbidity units per month. Normal turbidity levels at our plant are below 0.30 turbidity units. Additionally, multiple water samples taken between 2/18-23/2021 showed levels of 1.0 turbidity units. This was above the standard of 0.30 units. Because of these high levels of turbidity, there was an increased chance that the water may contain disease-causing organisms. During these elevated turbidity events, the system was under a Precautionary Boil Water Notice.	February 2021 March 2021	We have inspected and cleaned filters, as well as added chemicals to reduce lurbidity.  We sampled both untreated and treated water for the presence of collform bacteria.	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-cause organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches		

Lead and Copper Rule (LCR)					
TT Violation for Water Quality Parameters Not Meeting Minimum Values	We routinely sample water at consumers' taps for lead and copper. In 2015, tests showed lead levels in the distribution system water above the action level. Additionally, a routine inspection conducted in November 2016 by Mississippi State Department of health (MSDH) found inadequate application of treatment chemicals due to failing corrosion control system at the O. B. Curtis Water Treatment Plant. As required Environmental Protection Agency, we were required to take action to correct this deficiency. After testing and analyses of our treatment plants and distribution system, we began installation of optimized corrosion control treatment in October 2017. This treatment helps prevent lead and copper in pipes and plumbing components from dissolving into drinking water. During the monitoring periods of 2018, 2019, 2020, and 2021, we failed to consistently meet treatment technique requirements for our system which is a violation of the Lead and Copper Rule and a requirement of the City's Optimized Corrosion Control Plan. Corrosion control installation has been completed at O. B. Curtis Water Treatment Plant but is incomplete at J. H. Fewell Water Treatment Plant due to a reassessment of the Optimized Corrosion Control Treatment plan. The water system will remain in violation for not installing the corrosion control treatment until installation is complete and approved by the Mississisppi State Department of Health.	January 2021 February 2021 March 2021 July 2021 September 2021 November 2021	We have evaluated and made corrective actions to our existing corrosion control system to stabilize the pH in the distribution system. This evaluation and corrective actions are an ongoing process.  We have increased monitoring of water quality parameters in the distribution system and at the treatment plants.  The engineering consultant has completed the corrosion control studies for the water treatment plants and distribution system and the results are being evaluated.  Optimized corrosion control treatment will be installed and operational in 2021.	Infants and children who drink water containing lead in excess of the action level over many years could experience delays in their physical or mental development. The high level of lead in the blood is the actual reason for the delays. Children could show slight deficts in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.	
TT Violation for Failure to Install Corrosion Control	We routinely sample water at consumers' taps for lead and copper, In 2015, tests showed lead levels in the distribution system water above the action level. Additionally, a routine inspection conducted in November 2016 by Mississippi State Department of health (MSDH) found inadequate application of treatment chemicals due to failing corrosion control system at the O. B. Curlis Water Treatment Plant. As required Environmental Protection Agency, we were required to take action to correct this deficiency. After testing and analyses of our treatment plants and distribution system, we began installation of optimized corrosion control treatment in October 2017. This treatment helps prevent lead and copper in pipes and plumbing components from dissolving into drinking water. During the monitoring periods of 2018, 2019, 2020, and 2021, we failed to consistently meet treatment lechnique requirements for our system which is a violation of the Lead and Copper Rule and a requirement of the City's Optimized Corrosion Control Plan. Corrosion control installation has been completed at O. B. Curlis Water Treatment Plant but is incomplete at J. H. Fewell Water Treatment Plant due to a reassessment of the Optimized Corrosion Control Treatment plan. The water system will remain in violation for not installing the corrosion control treatment until installation is complete and approved by the Mississisppi State Department of Health.	2018, 2019, 2020, 2021 — the water system will remain under violation for not installing the Corrosion Control Treatment until the corrosion control installation is complete at J. H. Fewell Water Treatment Plant	We have evaluated and made corrective actions to our existing corrosion control system to stabilize the pH in the distribution system. This evaluation and corrective actions are an ongoing process.  We have increased monitoring of water quality parameters in the distribution system and at the treatment plants.  The engineering consultant has completed the corrosion control studies for the water treatment plants and distribution system and the results are being evaluated.  An amendment to the corrosion control study was completed and submitted to MSDH for review. MSDH has reviewed, commented, and accepted the contents of the amendment.  Optimized corrosion control treatment will be installed and operational in 2022.	Infants and children who drink water containing lead in excess of the action level over many years could experience delays in their physical or mental development. The high level of lead in the blood is the actual reason for the delays. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.	
Disinfection Byproducts Rule (DBPR)					
MCL Violation for HAA5 MCL Exceeded	Similarly, we routinely monitor for the presence of drinking water contaminants. Testing results from 4th Quarter 2020 and 1st Quarter 2021 show that our system exceeded the standard, or maximum contaminant level (MCL), for Total Haloacetic Acids (HAA5). The standard for HAA5 is 60 ug/L. It is determined by averaging all the samples collected at each sampling location for the past 12 months. The level of HAA5 averaged at one of our system's locations for the 4th Quarter 2020 was 66 ug/L and for 1st Quarter 2021 was 65 ug/L.	4 <sup>lh</sup> Quarter 2020 1 <sup>st</sup> Quarter 2021	We are working to minimize the formation of TTHM or HAA5 while ensuring we maintain an adequate level of disinfectant. We have taken additional steps to change disinfectant type/levels, remove natural organic matter, and increased flushing of water lines to determine if our efforts have been effective.	Total Haloacetic Acids or HAA5 are five Haloacetic acid compounds which form when disinfectants react with natural organic matter in the water. People who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.	

## Lead and Copper

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Our water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When

your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead. The Mississippi Public Health Laboratory offers lead testing. Please contact 601.576.7582 if you wish to have your water tested.

Significant Deficiencies for System # 250008

During a sanitary surveys conducted on 11/18/16, 2/03/2020 and 11/08/2021, the Mississippi State Department of Health cited the following significant deficiency(s):

Function and Condition of Treatment Facilities (3)

Condition of Source Facilities (2)

Capacity of Treatment Facilities

Capacity of Pumps

Condition of Water Storage Tanks

Monitoring Plans and Systems (3)

Inadequate application of treatment chemicals and techniques

Inadequate follow up on previous deficiencies

Water System Staffing

Significant Deficiency Not otherwise specified (4)

Corrective Actions: Our system is under an Administrative Compliance Order on Consent, Docket No. SDWA-04-2020-2301 (AOC) through the EPA. All deficiencies are currently scheduled to be addressed by May 2024 contingent upon current approval by the EPA.

#### Fluoridation

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", our system # 250008 is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2 ppm was 11. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 81%.

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", our system # 250012 is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2 ppm was 12. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 96%.

#### Other Information

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1.800.426.4791.

The City of Jackson works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



City Services Billing 1000 Metrocenter Mall, Suite 103 Jackson, MS 39209

Office Hours Monday - Friday 7:30 AM to 5:30 PM

Please call us at 601-960-2000

#### IMPORTANT INFORMATION

Metered usage data is now available and any usage less than this amount will be credited to your account.

The City of Jackson found high levels of lead in drinking water in some homes.Lead can cause serious health problems.For more information please call the City's Water Facilities Division at 601.960,2090 or visit the City's website at www.jacksonms.gov

Our drinking water system has incurred Treatment Techniqueviolations. For more information, please call the City's WaterFacilities Division et 601.960.2090 or visit the city's websiteat http://www.jacksonms.gov/DocumentCenterNiew/4567.



Due to the new Digital Self Service (DSS) system conversion.please re-establish e-bills at this website:https://dss-coj.opower.com/dss/login.









#### **ACCOUNT INFORMATION**

Account Name: Account Number: Service Address: Service Period: Bill Date:

Due Date:

06/02/22 to 07/06/22 07/06/22

07/21/22

## METER READ INFORMATION WATER (WITH WASTE

Meter#	Prior Read	Current Reed	<u>Usage</u>
13982017-D1	39977	41115	1138

#### **CURRENT CHARGES**

Description	<u>Amount</u>
Billing Period: 06/02/22-07/06/22	
Water Charges	
11.380 ccf Water Usage @ \$3.85 per ccf	\$43.81
Service Fee Over 300 cf @ \$11.55	\$11.55
Sewer Charges	
11.380 ccf Waste Water @ \$5.36 per ccf	\$61.00
Summer Sewer Credit 15%	\$-9.15
Sanitation Charges	
Sanitation Charge @ \$4.80 per Week	\$24.00
Total Current Charges	\$131.21

#### PAYMENTS/ADJUSTMENTS/OTHER

Payment Received	\$0.00
Total Payments/Adjustments/other	\$0,00

#### SUMMARY

Previous Balance:	\$65.09
Payments/Adjustments/Other	\$0.00
Outstanding Balance:	\$65.09
Total Current Charges:	\$131.21
Total Amount Due:	\$196.30

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT PLEASE MAKE YOUR CHECK PAYABLE TO: CITY OF JACKSON

Service Address: 06/02/22 to 07/06/22 Service Period: Account Number: Due Date: 07/21/22 Amount Due: \$196.30 **Amount Enclosed:** 

> SEND REMITTANCE TO:

CITY SERVICES DEPT. #07-0006 P.O. BOX 2819 TUPELO MS 38803